

Excerpt from report: "Upper Clark Fork Diversion Inventory," by Trout Unlimited for Watershed Restoration Coalition, Deer Lodge, MT, December, 2011.

p. 71:

Lost Creek — Lampert-Hadley Diversion

Location: 46.2204100, -112.7688800

Date surveyed: 8/3/2011

Type of diversion: Gravity

Spillway type: Natural Channel

Diversion span: 0% of channel Length: N/A Height: N/A

Estimated amount of water diverted at time of survey: >90%

Water velocity through diversion: Maximum: N/A Minimum: N/A

Water surface difference: 0 ft Maximum plunge pool depth: N/A

Maximum tailwater control depth: N/A Residual pool depth: N/A

Plunge pool distance from outlet: N/A Tailwater control distance from outlet: N/A

Bankfull width: Inlet: 16.0 ft Outlet: 16.0 ft

Upstream Fish Passage Structure: N Fish Screen: N

Lockable Headgate: Y Flow Measurement Device: N

Streamflow Measurements

Location	Streamflow (cfs)
Upstream from diversion	N/A
In diversion ditch	2.5
Downstream from diversion	N/A

Fish Entrainment Data

Number of fish captured	41
Fish species captured	brown trout (35), longnose sucker (6)
Entrainment survey date	8/3/2011

General Comments— The Lampert-Hadley Diversion consists of a screw-type sliding headgate and culvert set into the left bank at the outside of a bend in Lost Creek. At the time of the survey this diversion was taking the majority of the water left in Lost Creek. Large numbers of fish were staged in the pool adjacent to the headgate. Stagnant and warm water conditions appear to have contributed to a fish kill downstream with many dead trout observed in the creek channel.

Fish Passage— This diversion does not impact upstream fish passage in Lost Creek. The ditch clearly entrains fish as documented by FWP electrofishing data.

Recommendations— Lost Creek was severely dewatered in the reach adjacent to this diversion at the time of our survey. Fish passage issues at this diversion are clearly secondary to the dewatering problem. Water use at this diversion and all of lower Lost Creek should be investigated to seek opportunities to improve in-stream flow conditions. If the dewatering can be addressed, this site appears to be a good candidate for a screening project.



Dewatering at Beckstead Ditch headgate, August, 2011



Dead brown trout at Beckstead Ditch on Lost Creek, August, 2011 (warm water)